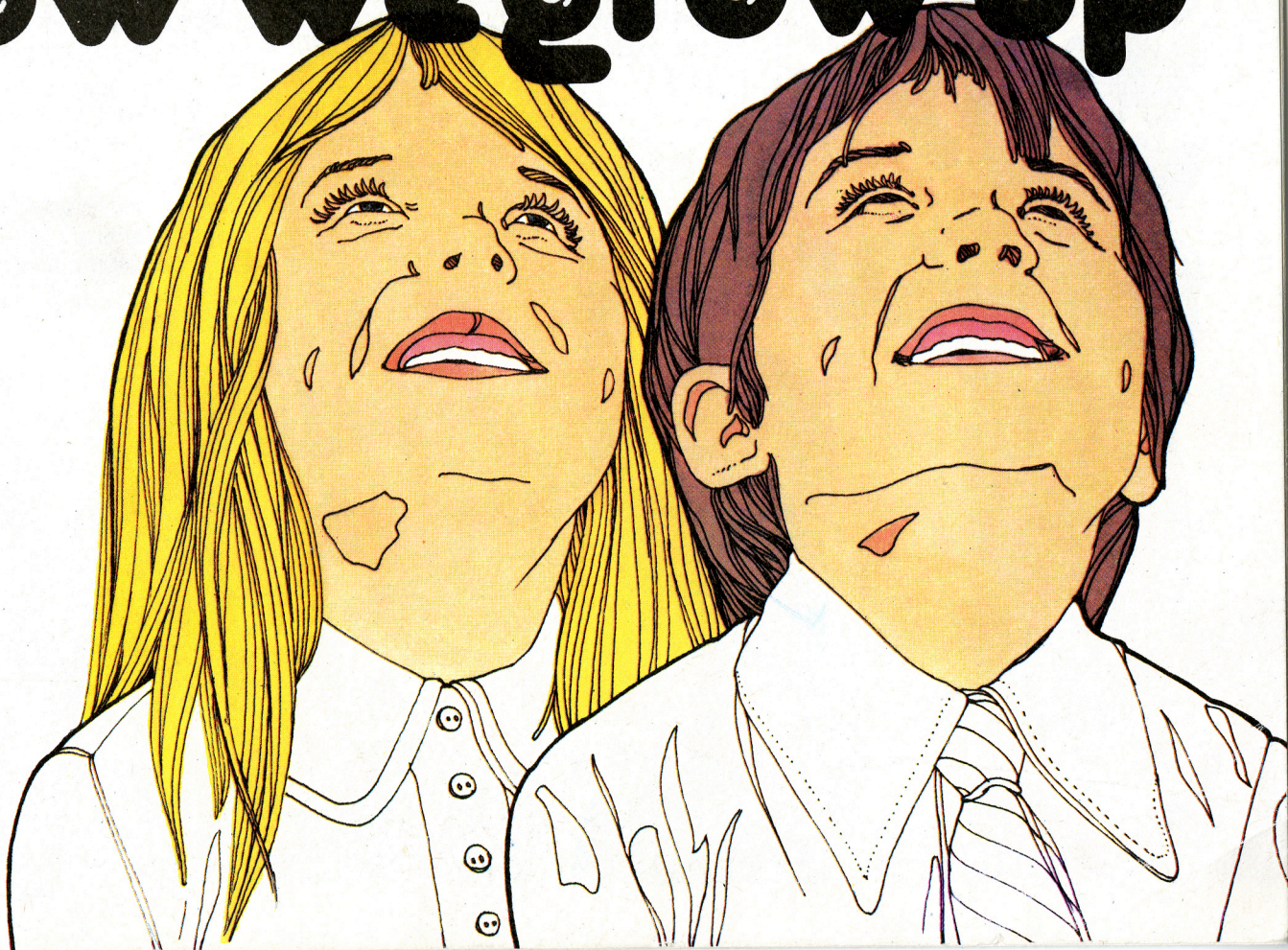
how we grow up



the way we grow

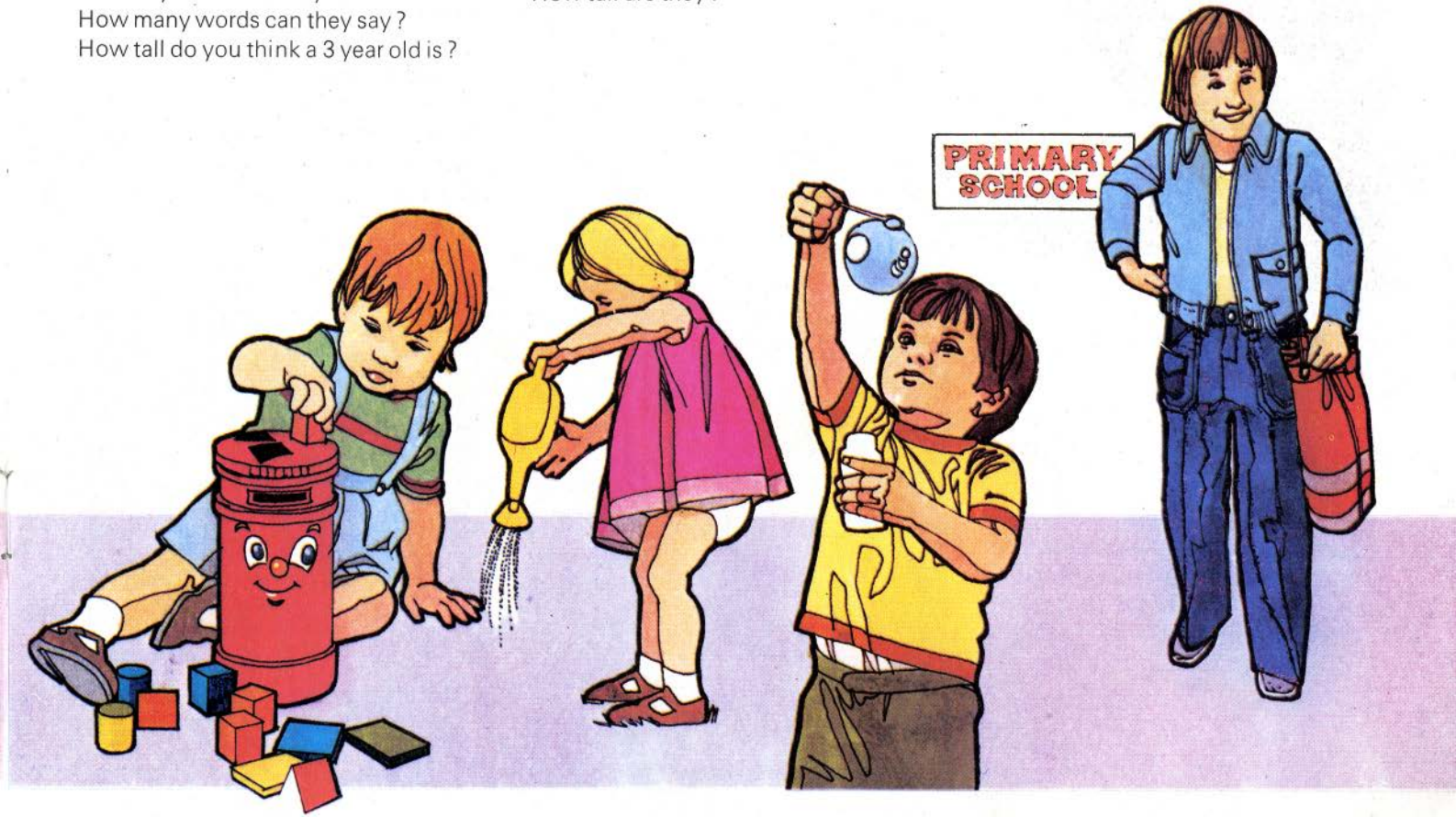
Have you ever thought about how you grow up ?
And have you ever thought what changes take place in your body as you grow ?

Let's start by looking at a baby and what he can do. What does a 6-month-old baby look like ?
What about his head, is it big or small ?
Does he eat food like you ?
What food do we give babies to eat ?
How do they let you know when they want something ?
Can they play football ?

Now do you know as much about 3 year olds ?
How many teeth do they have ?
Can they run as fast as you ?
How many words can they say ?
How tall do you think a 3 year old is ?

Let's look at 7 year olds.
Where do they go at 9 o'clock every day during the week ?
How tall are they ?

When they smile what do you see ?
What can they do with a pencil ?

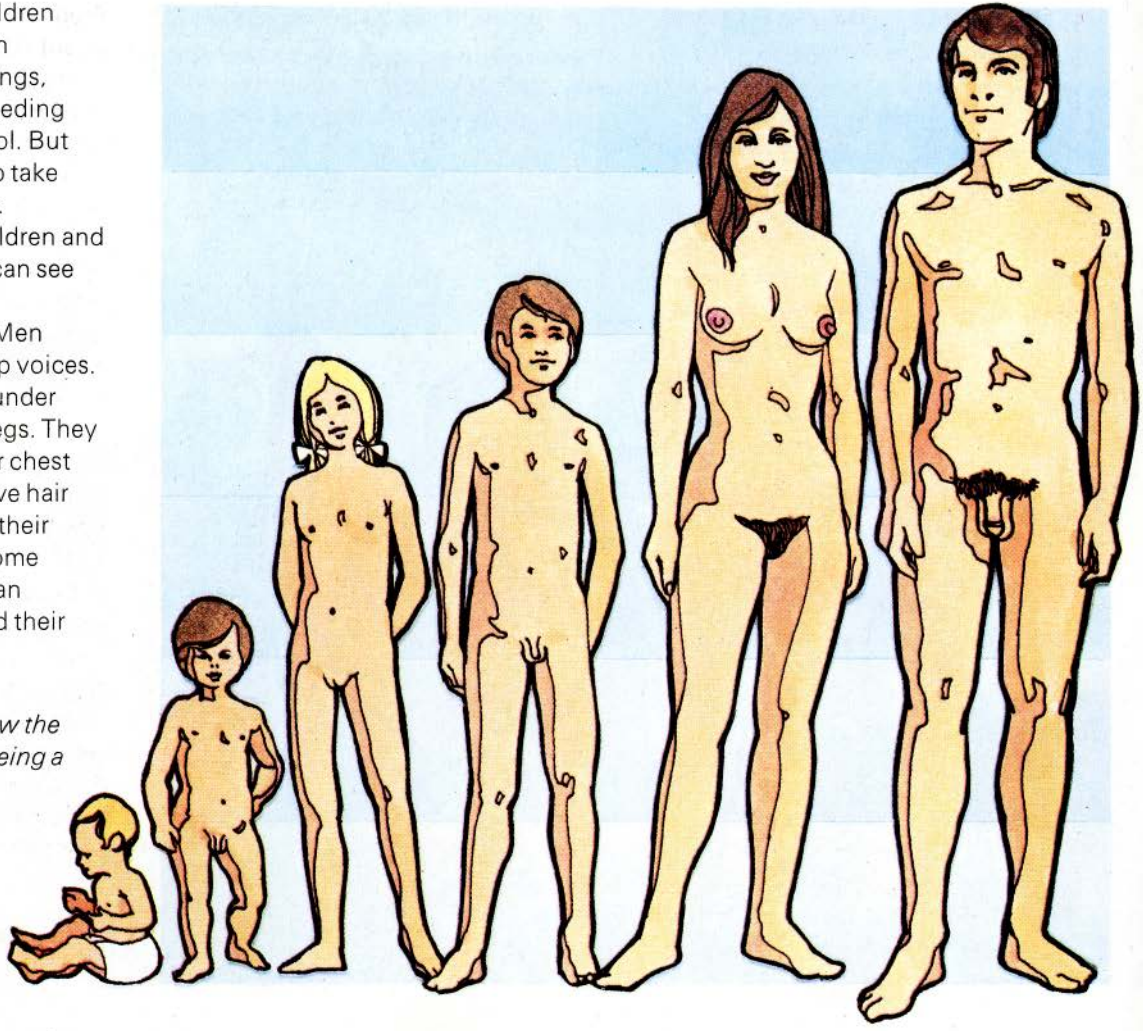


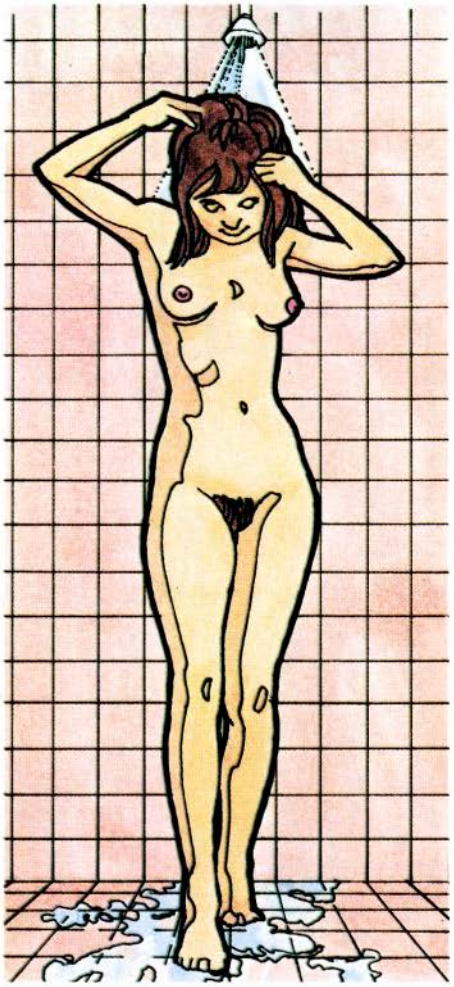
You will see that as well as children growing bigger they have been learning to do a great many things, talking, doing up shoelaces, feeding themselves and going to school. But there are still lots of changes to take place before a child is an adult.

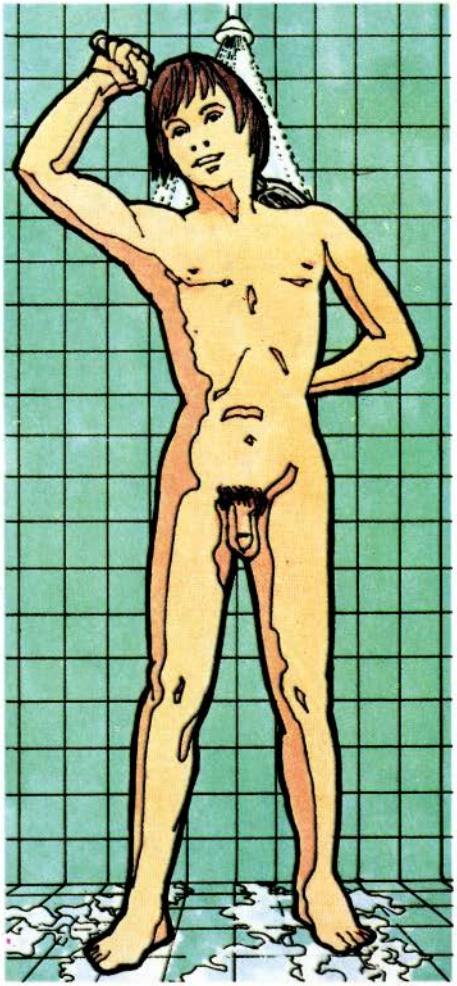
If you look at 9-year-old children and then look at their parents you can see lots of differences.

How many can you think of? Men have broad shoulders and deep voices. They have hairs on their face, under their arms and between their legs. They might have a lot of hair on their chest and arms and legs. Women have hair under their arms and between their legs too. They have breasts. Some women's breasts are bigger than others. Their hips are wider and their waists narrower than men's.

In the drawing you will see how the body changes in shape from being a baby to being grown-up.







From the time you are a baby until about 10-14 years old when your body starts changing, boys' and girls' bodies look very similar except for one important obvious difference, boys have a penis and a scrotum. Also boys and girls often wear different clothes and may have their hair done differently.

We call the time when a child's body starts to change to an adult's body, puberty, or sometimes adolescence. Not everybody starts at the same time, and girls usually start before boys. Some girls may start as early as 9, others at 14. Usually it's about 12 years old. Boys' changes start at roughly 12 to 15 years.

Because everybody is different, during adolescence some boys and girls will be much taller and heavier than others the same age. Some girls may start wearing bras at 11, other girls may not need them until they are 15. If you start developing later than the others you may feel you are never going to catch up, but you will.

puberty

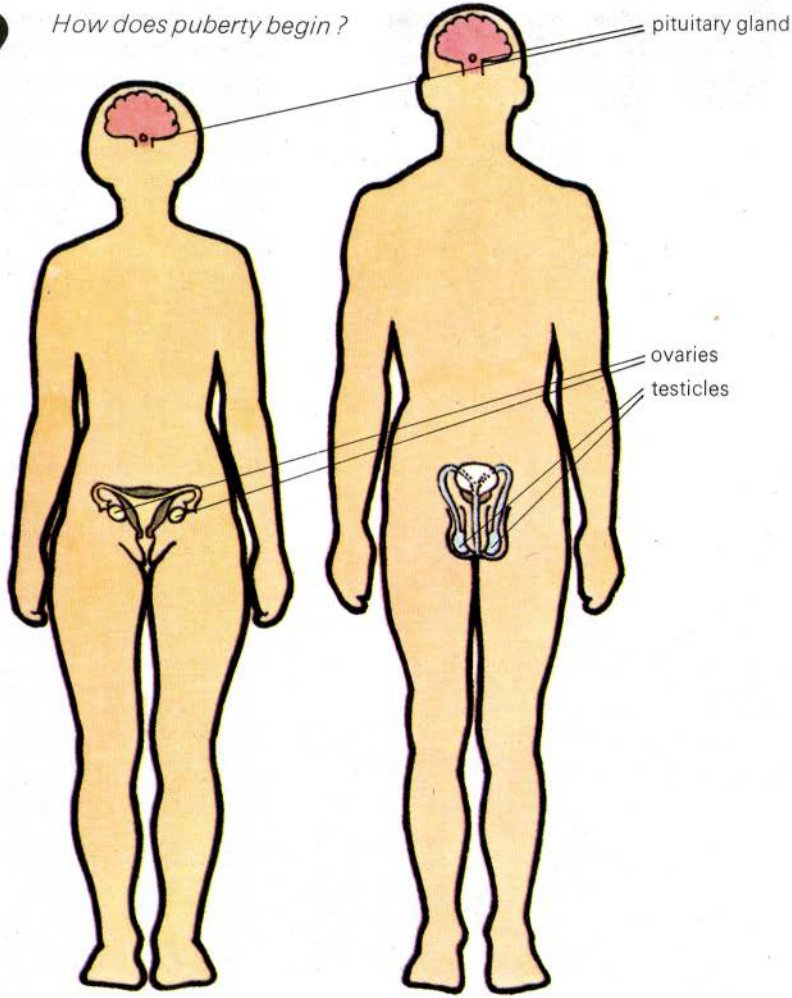
The body has some very small but important parts called the ductless glands. These produce chemical messages (hormones) which tell the body how to work. When you feel nervous before a race, that is the work of the adrenal gland, and although it is not a very nice feeling it will help you to run faster. One of these glands is called the pituitary gland. It is about the size of a pea and is in the brain. Although it is so small, it is this gland which controls growth and starts a child's body changing to an adult's. Also at the beginning of adolescence, started by the pituitary, the sex glands of a boy and girl start to work.

The sex glands of a girl are called the ovaries. She has two and they are in the lower part of her body.

The sex glands of a boy are called the testicles and he has two in the scrotum – the bag of skin between the legs.

It is the hormones of the sex glands which cause the change in shape and size of the body and growth of body hair.

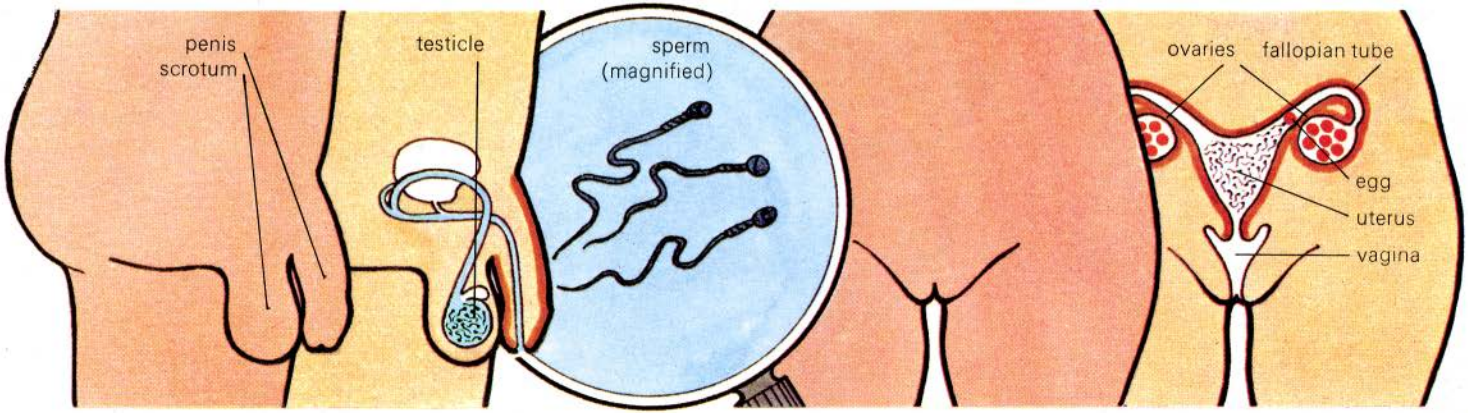
How does puberty begin ?



boys

The boy's reproductive organs are in the lower part of the body. They consist of his penis which is also used for passing water, and the scrotum, the small bag behind the penis. Inside the scrotum are the testicles which make the sperm – the father's half of the baby. From puberty onwards the testicles make millions of tiny sperm, most of which are wasted.

Most of the time a boy's penis is soft and hangs downwards, but it can also become stiff and hard and stand out from the body. This is called an erection. All boys, and even babies, have erections, but during adolescence a boy will have more. Some boys have one a day, others once a week, or once a month. When the testicles start to make the sperm they cannot be stored forever in the body so that they are pushed down the erect penis and out of the body. This usually happens at night when the boy is asleep, that is why it is called a wet dream. They may only remember that they had a wet dream when they find a wet patch on their pyjamas or sheets.



girls

The girl's reproductive organs – the parts of the body for having a baby – are also in the lower part of the body.

There are two ovaries which contain the tiny eggs – the mother's half of a baby. The ovaries are about the size of a walnut. From each ovary leads a narrow tube to the uterus (womb).

From the uterus to the outside between the legs runs the vagina. The baby grows inside the uterus. In a grown-up woman the uterus is about 3 inches high and 2 inches wide, and the vagina is about 4 inches long, so they are not very big.

When a girl reaches puberty an egg ripens in one of the ovaries and is pushed into the fallopian tube. The uterus has been getting ready for the egg in case it is going to grow into a baby. Most eggs don't, so the spongy soft lining of the uterus is not needed and is passed out of the body through the vagina. Mixed with the lining is a small amount of blood. This is called a period.

A girl's period lasts for about 3 to 7 days. Periods usually happen once every 28 days but some girls may have their period every 26 days and others every 31 or 36 days. At first a girl's periods may be very irregular. She may go for several months without one but as her body settles down her periods should become fairly regular.

Periods stop when a woman is between 40 and 55. This is called the menopause.

When a girl has her period she must wear a sanitary towel to absorb the waste blood. Sanitary towels should be changed often and are made of cotton wool and lint. You can see one in the picture. In school or public toilets there are usually special paper bags and bins to put the soiled towels in. Your mother will tell you what to do at home. Once girls have stopped growing, they can wear another type of sanitary towel called a tampon which fits inside the vagina.

It is very important that during the period a girl makes sure she is clean. There is no reason why she should not bath and wash her hair and play sport.

mum & dad

You have seen the changes in the body which takes place before a girl and boy become adults and how their bodies are getting ready for the day when as adults they may decide to have a baby.

A baby needs a mother and a father and because it starts as a tiny egg and an even tinier sperm joining together, it must grow inside its mother's body until it is old enough to live in the world. And so the father must put his sperm very close to the mother's egg.

This is one of the reasons why a man's penis can become firm and erect. Do you remember the soft vagina of a woman that leads from the outside of her body to the uterus ? This is where the sperm are left by the father during love-making or sexual intercourse.

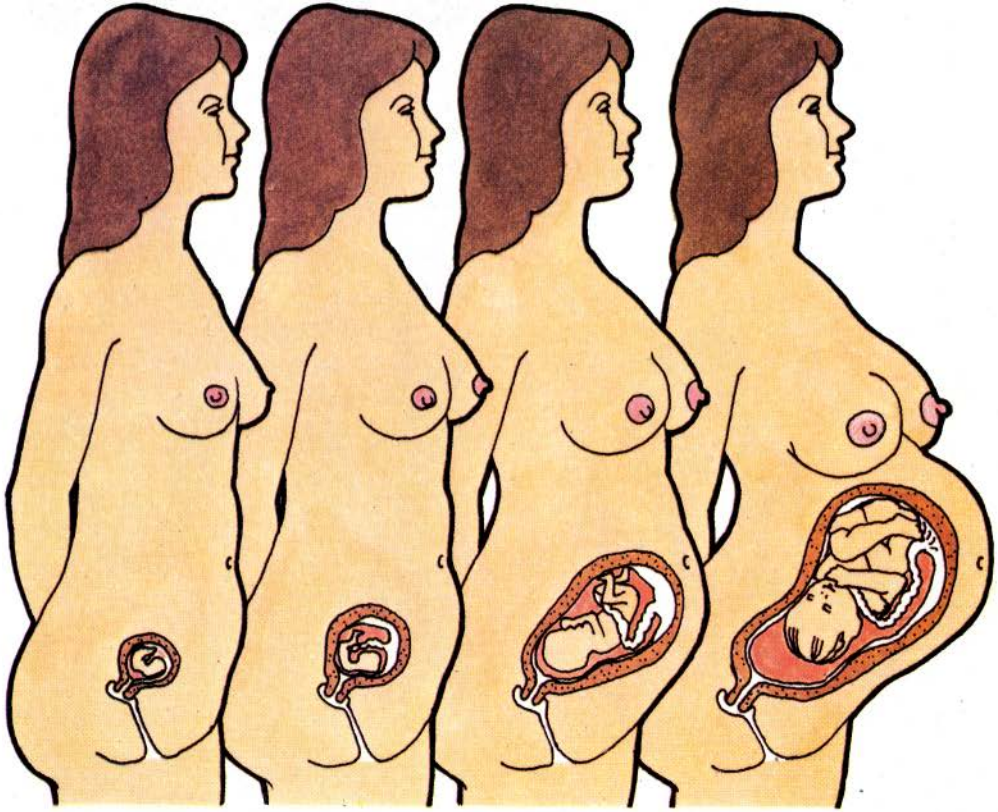
When two people make love they have great feelings of love, tenderness and pleasure towards one another. They lie close together and kiss. The man's penis becomes erect and firm so that he can slide it slowly into the woman's soft vagina. He moves his penis backwards and forwards several times and then the sperm in a small quantity of fluid comes out of the hole in the end.

They start to move up through the uterus and into the fallopian tubes. If there is an egg in the tube one sperm joins with it. This is fertilisation – the beginning of a baby.

pregnancy

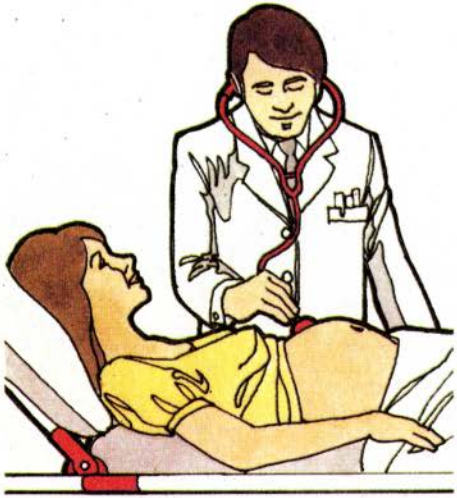
When a baby is being made it starts to grow in the uterus. There it is warm and safe. It has a special cord joining it to its mother, through which it gets its food. You can see the scar where your cord was, you probably call it your belly button or your navel.

Love-making is not just for having a baby but it is a wonderful way for a husband and wife to show how much they love and care for each other. Family planning means a mother and father deciding when it is the best time for them to have a baby.



ante natal

While a mother is pregnant, that is having a baby, she must do many things. She goes to the doctor and the midwife, who check to see if the baby is growing and how the mother is.



She must eat the right foods. What do you think they are ? She gets the clothes ready for the baby. How many things do you think the father has to do ? He can't do much to help the baby at this time, but he can do a great deal to help the mother.

After 9 months the baby is ready to be born. The mother will probably then go into hospital.

birth

When the birth starts the mother will feel a tightening feeling in her uterus. This is called labour, because it is hard work. The uterus is starting to push the baby out of the mother's body. Labour takes quite a long time – anything from 6 to 24 hours. First babies usually take longer than second babies.

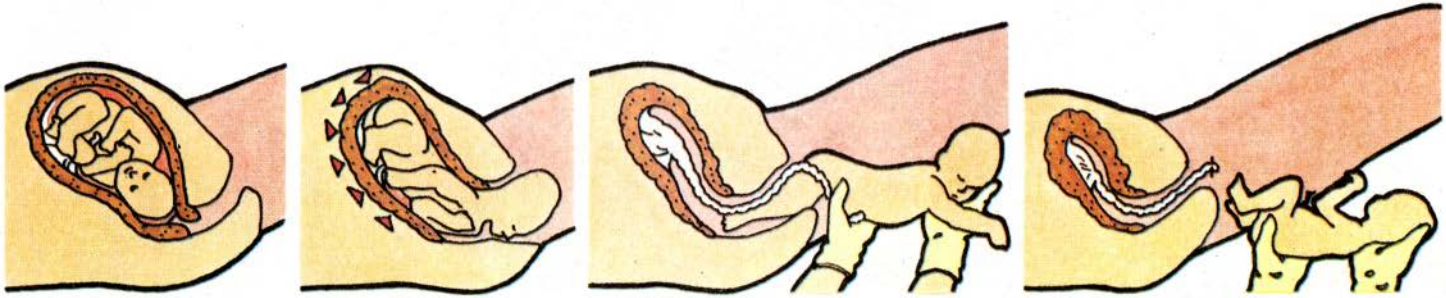
During labour the midwife stays with the mother and sometimes the father stays as well.

Gradually the uterus and the vagina are opening up to let the baby slide through. This has to happen slowly or else it would be too great a shock for the child to be suddenly pushed into the outside world.

Usually the baby's head is born first because this is the largest part of the baby's body. If his bottom comes first it is called a breech birth.

The midwife guides the baby's head out of the opening of the vagina and the rest of the body slips out. The midwife ties the cord with special string and cuts it. The mother and baby cannot feel the cut. In about 7 days the cord just withers away.

Soon after the baby is born the after-birth, which passed food from the mother's blood to the baby, is pushed out of the uterus and it is all over. Gradually the uterus goes back to its usual size. The mother is made clean and comfortable and given her baby to hold.

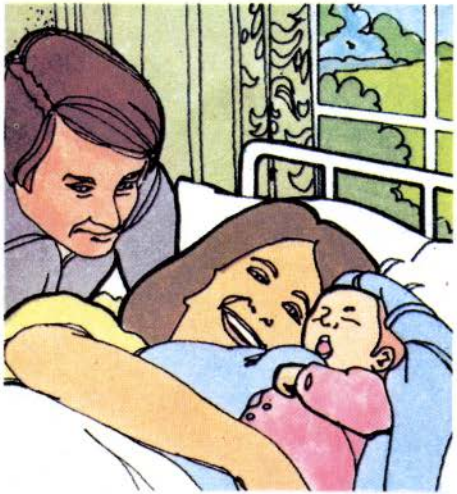


early days

Babies need special care during the first days of their life and the midwife looks after the baby and mother, whether they are inside the hospital or at home, for at least 10 days. After that the health visitor visits the family and will help the mother. The family can also go to their doctor.

Grandparents and neighbours often help with the new baby.

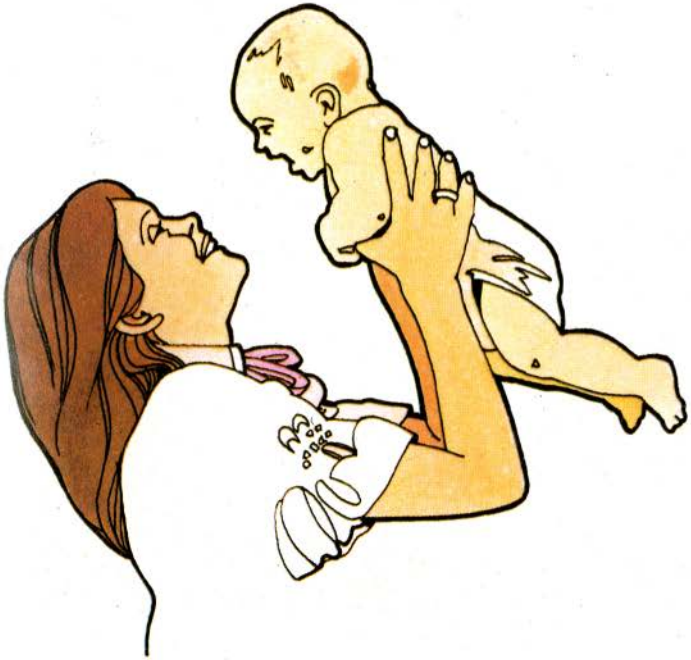
New babies are very exciting events. But they mean hard work too. For one thing they are around for a long time and 24 hours a day. Think of all the



things which parents have to do for their children, and not just when they are babies but even when they are 15 or 16 years old.

How many things would you have to buy for a new baby ? How does the mother feed the baby, and how many times a day ? Do you know how many new clothes you have had since you were born ?

Having a baby is a rewarding experience, but it also takes a lot of responsibility and love.



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